

REMARKS

In the last Office Action claims 13, 17-19 and 21 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Claims 12-16 and 21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Engle et al. in view of Fujioka et al. Claims 17-20 and 22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Engle in view of Fujioka et al. in combination with one or more additional references. Claim 12 was provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of co-pending application serial no. 09/804,392 in view of Niki et al. (US Patent 5,835,845).

Claim 12 has been amended to more clearly identify the nature of the slave control units. Claims 13, 17 and 21 have been amended to overcome the noted indefiniteness. Claim 19 was amended to correct a misspelled word. Reconsideration and allowance of the application are respectfully requested in view of the following remarks.

In rejecting the claims as being obvious over Engle et al. in view of Fujioka et al. the Examiner has again referred to the elements (84, 86) of Engle et al. as a plurality of slave control units. As pointed out in the last response the units (84, 86) of Engle et al. are sensors and do not control anything whatsoever. In attempting to support such an interpretation the Examiner has stated that since the units (84, 86) are controlled by a particular frequency generated by the main control unit that they are slave control units. It is respectfully pointed out that a control unit is entirely different from a controlled unit.

The distinction between a “main or master control unit” and a “slave control unit” is quite clear and of general use in the electronics and control fields to indicate control units of different

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hierarchical levels. A slave control unit is a control unit subordinate to the controls issued from another control unit belonging to a higher hierarchical level. A slave control unit remains a slave control unit, that is, a unit adapted to issue controls and commands to one or more control devices. Claim 12 has been amended to clarify that each slave control unit is installed upon a respective carriage or wagon and is connected, in the respective carriage or wagon, to both transmission lines and to solenoid valve units associated with pneumatic brake actuators for controlling the solenoid valve units. Thus the elements (84, 86) of Engle are clearly controlled units and do not in any way exert controls at the direction of the main control unit. Therefore it is submitted that claim 12 would not be the least bit obvious in view of the teachings of Engle et al. in view of Fujioka et al. Since claim 12 is the only independent claim in the application the dependent claims 13-22 inclusive would also be allowable for the reasons set forth with respect to claim 12.

With respect to the obviousness-type double patenting rejection of claim 12 it is submitted that claim 12 would not be obvious over claim 1 of co-pending application serial no. 09/804,392 in view of US Patent 5,835,845 to Niki et al.

In the last four lines of page 8 of the Office Action the Examiner has correctly pointed out that the co-pending application claims the use of different frequencies on two communication lines whereas the instant application does not claim that feature. It was then argued that it would have been obvious for a skilled man to modify the lines of the instant application to make them operate at a different working frequency as allegedly taught by Niki et al. It would appear that

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the teachings of Niki et al. are totally immaterial with respect to claim 12 of the present application since claim 12 does not claim lines working at different frequencies.

Furthermore the patent to Niki et al. in column 2, lines 60+ teaches how to realize bidirectional communications over a plurality of different up and down line channels by a single communication cable through frequency division multiplex transmission. Thus Niki et al. clearly discloses a system wherein a single physical transmission line (cable) is used to support bidirectional communications. Bidirectional communications on a single physical transmission line may only be performed by adopting a multiplex technique. Different communications may be transmitted in either direction on the same physical carrier provided such communications have different frequency allocations or time allocations or different phase allocations etc.

Thus it is not seen how Niki et al. has anything whatsoever to do with the present application, more specifically to claim 12.

Claim 12 of the present application recites a system including first and second bidirectional transmission lines which extend parallel to and spaced from another along the train. Thus Niki et al. would not be the least bit relevant since it discloses a system actually comprising a single bidirectional transmission line. Therefore it would not be the least bit obvious to combine the teachings of Niki et al. with claim 1 of the co-pending application. Accordingly claim 12 would not be considered unpatentable over claim 1 of co-pending application 09/804,392 in view of Niki et al. It is respectfully requested that the rejection of claim 12 under the judicially created doctrine of obviousness-type double patenting be withdrawn.

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In view of the foregoing amendments and arguments it is submitted that claims 12-22 inclusive are clearly patentable over the prior art and it is respectfully requested that these claims be allowed and the application passed to issue forthwith.

If for any reason the Examiner is unable to allow the application on the next Office Action and feels that an interview would be helpful to resolve any remaining issue, the Examiner is respectfully requested to contact the undersigned attorney for the purpose of arranging such an interview.

Since the due date for response to the outstanding non-final Office Action fell on a Saturday, the filing of this response Monday, March 24, 2003 is still considered to be timely filed.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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